5/19/99

United States Environmental Protection Agency

Office of Prevention, Pesticides and Toxic Substances (7501C)

PESTICIDE FACT SHEET

Active Ingredient Name: Xanthine and Oxypurinol

OPP Chemical Codes: 116900 (xanthine) and 447509 (oxypurinol)

SUMMARY

Xanthine and oxypurinol, combined in equal amounts, are used in cockroach bait stations to attract and control cockroaches in indoor environments, including homes, schools, and vehicles. Use of these bait stations is not expected to harm humans or pets.

I. DESCRIPTION OF THE ACTIVE INGREDIENTS

The active ingredients, oxypurinol and xanthine, are formulated into a pellet that is enclosed in a bait station. Oxypurinol is a breakdown product of the human drug allopurinol, which is used to treat gout and certain blood diseases. Xanthine is a naturally occurring substance found in all living cells. Acting together, oxypurinol and xanthine interfere with metabolic processes needed for cockroach growth and reproduction. It may take six to ten weeks for numbers of cockroaches to decrease noticeably.

II. USE SITES, TARGET PESTS, AND APPLICATION METHODS

Use Sites: The bait may be used anywhere indoors, but is most effective in places where cockroaches hide, such as in dark, warm, damp locations near food and water. Representative use sites include: food manufacturing and food processing facilities, hospitals, schools, laboratories, homes, pet shops, and commercial vehicles.

Target pests: Cockroach

Application Methods: The active ingredients are inside a bait station that can be placed anywhere indoors; especially recommended are damp places favored by cockroaches.

III. ASSESSING RISKS TO HUMAN HEALTH

No adverse human health effects are expected from use of xanthine/oxypurinol in bait stations. Based on tests with this mixture of active ingredients, there is no evidence of mammalian toxicity from amounts much greater than people, including children, would encounter from these bait stations. After considering available information, the Agency concludes that the bait station can be used safely when label precautions are followed. Because the active ingredients are enclosed in a sealed bait station, exposure is expected to be minimal.

Whether or not a substance poses a risk to humans or other organisms depends on two factors: how toxic the substance is, and how much of it an organism is exposed to. Therefore, the EPA considers toxicity data and exposure data in determining whether to approve a pesticide for use.

IV. ASSESSING RISKS TO THE ENVIRONMENT

Because the bait is designed to be used indoors and the active ingredients are contained in the bait station, exposure to any species except the cockroach is unlikely. Therefore, no harmful environmental effects are expected.

V. REGULATORY INFORMATION

Xanthine/oxypurinol was registered (licensed for use) in May 1999. As of May 1999, the only EPA-approved end use product with xanthine and oxypurinol as active ingredients is the cockroach bait station.

VI. PRODUCER (REGISTRANT) INFORMATION

Dominion BioSciences, Inc.
Blacksburg, VA 24060

VII. FURTHER INFORMATION

1. See accompanying Registration Eligibility Document for more technical details.

2. Contact:

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